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December 29, 1998

By Hand Delivery

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FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, DC 20554

Ms. Magalie Roman Salas
Secretary
Federal Communications Commission
The Portals TW-A325
445 12th Street, SW
Washington, DC 20554

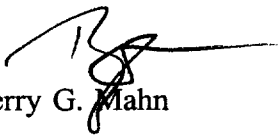
Re: 1998 Biennial Regulatory Review -- Amendment of Part 18 of the
Commission's Rules to Update Regulations for RF Lighting Devices
ET Docket No. 98-42

Dear Ms. Salas:

Enclosed please find copies of five (5) letters hand delivered as *ex parte* comments to Commissioners Kennard, Ness, Furchtgott-Roth, Powell and Tristani on December 21, 1998, submitted on behalf of **Fusion Lighting** in the above-captioned proceeding.

If you have any questions, please contact me.

Very truly yours,


Terry G. Mahn

/seg
Enclosures/5 Originals & 5 Copies

cc: Mitchell Lazarus [w/encl.]
Michael Ury, Fusion Lighting [w/o encl.]
Ellen Ranard, Esq., Fusion Lighting [w/o encl.]

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FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, DC 20554

Commissioner Susan Ness
Federal Communications Commission
1919 M Street, N.W.
Washington, DC 20554

Dear Commissioner Ness:

Twenty-two years ago, Fusion Systems came before the FCC seeking guidance on where in the radio frequency spectrum it should locate industrial lighting technology, then under development. The FCC directed Fusion to use the 2.45 GHz ISM band which was allocated specifically for such purposes.

Subsequently, Fusion Lighting, a spin-off of Fusion Systems, developed a revolutionary RF lighting product into which the U.S. Department of Energy has poured millions of tax dollars. Last year, the Department of Commerce (NTIA) supported a waiver of FCC rules to help reduce the cost of these devices to make them more affordable to end-users.

At about the same time Fusion was experimenting with its RF lighting technology, the Commission began to cautiously open up the 2.45 GHz ISM band to Part 15 device usage. At the urging of the ISM industry, however, the Commission intentionally held these devices to low operating power levels in order to avoid, what it called, the "danger" that Part 15 usage would eventually lead to "petitions for protection from ISM" equipment.

In the last couple of years, Fusion Lighting and others in the ISM industry have repeated their warnings to the FCC, in Dockets 96-8 and 96-102, about conflicts with Part 15. Heeding these voices, the Commission last year warned the Part 15 industry again about the risks of ISM spectrum interference:

The manufacturers and operators of spread spectrum transmitters are reminded that the operation of Part 15 devices is subject to the conditions that any received interference, including interference from ISM operations, must be accepted. Docket 96-8, ¶ 14.

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If adopted, the proposed limits would drive RF lighting out of the 2.45 GHz ISM band, stranding millions of dollars in public and private investment. Moreover, such actions, tantamount to a "spectrum cleansing", would give the wireless LAN manufacturers virtually unfettered use of free spectrum in which to compete against the cellular, PCS and other wireless services that have cost other American corporations billions of dollars through FCC auctions.

Fusion and the ISM industry are now being forced to defend their use of spectrum that was set aside by international treaty nearly a half-century ago and revalidated as recently as 1994 by an FCC-led international study group. In *ex parte* comments filed by spectrum opponents, Fusion has been accused of intentionally withholding test data from the Commission and the industry, of callously refusing to spend "pennies" to avoid harmful interference to other spectrum users and of promoting a technology -- funded by the federal government -- that will cause "severe and widespread interference" and disrupt usage in the 2.45 GHz band worldwide. These allegations are utterly baseless as the Commission's technical staff well knows.

Nonetheless, it is a chilling reminder of how easily large corporate interests are able to quickly reverse sound regulatory policy without the benefit of a full public debate. Accordingly, Fusion respectfully urges you, and the other Commissioners, to conclude pending Docket 98-42 without delay and to withhold any judgment on the in-band issues until Fusion and other ISM manufacturers have had a full opportunity to respond to the allegations raised.

We appreciate your attention to this matter.

Very truly yours,



Terry G. Mann

/seg

cc: Daniel Connors

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Commissioner William E. Kennard
Federal Communications Commission
1919 M Street, N.W.
Washington, DC 20554

Dear Commissioner Kennard:

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Very truly yours,



Terry G. Mahn

/seg

cc: Ari Fitzgerald

93507.W11

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COMMUNICATIONS SECTION
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

December 21, 1998

VIA HAND DELIVERY

Commissioner W. Furchtgott-Roth
Federal Communications Commission
1919 M Street, N.W.
Washington, DC 20554

Dear Commissioner Furchtgott-Roth:

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Terry G. Mahn

/seg

cc: Paul Misener

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Commissioner Gloria Tristani
Federal Communications Commission
1919 M Street, N.W.
Washington, DC 20554

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WASHINGTON, DC

Dear Commissioner Tristani:

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Terry G. Mann

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cc: Karen Gulick

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Federal Communications Commission
1919 M Street, N.W.
Washington, DC 20554

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cc: Peter A. Tenhula

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